

Remarks/Arguments

Claims 1, 20, 24 and 25 have been amended. Claims 26-28 have been added.

A check in the amount of \$500.00 to cover the fee payment for added claims is being filed with this Amendment. Authorization is granted to charge our deposit account no. 03-3415 for any additional fees necessary for entry of this Amendment.

The Examiner has rejected applicant's claims 20-25 under 35 USC §102(b) as being anticipated by the Nakamura (U.S. 5,337,084) patent. The Examiner has allowed applicant's claims 1-14 and 16-19. Applicant has amended applicant's independent claims 1, 20, 24 and 25 and with respect to these claims, as amended, the Examiner' rejection is respectfully traversed.

Applicant's independent claims 1, 20, 24 and 25 have been amended to better define applicant's invention. Applicant's amended claim 1 now recites an apparatus comprising a driving device which drives a focus adjusting system, and a control device having a driving mode for minutely driving said focus adjusting system before a climbing-drive mode, which in said driving mode, repeatedly performs determination of a focusing state of said focus adjusting system while causing said driving device to drive said focus adjusting system, and if said focus adjusting system has been driven in one direction until the number of times of the determination repeatedly performed reaches a predetermined number of times, inverts said focus adjusting system from being driven in said one direction.

The construction recited in applicant's amended independent claim 1 is not taught or suggested by the cited art of record. More particularly, there is nothing taught or suggested in the Nakamura patent of a control device having a driving mode for minutely driving the focus adjusting system before a climbing-drive mode. In the Nakamura patent, the focusing

operation by the focus adjusting system is performed using a mountain climbing control method. The Nakamura patent, however, does not mention any driving mode for minutely driving the focus adjusting system before the climbing control method.

Moreover, there is no teaching or suggestion in the Nakamura patent of a control device which, if the focus adjusting system has been driven in one direction until the number of times of the determination performed reaches a predetermined number of times, inverts the focus adjusting system from being driven in the one direction. Instead, the Nakamura patent teaches that the focusing operation is reversed if it is determined that an “in-focus” state has not been accomplished (Step S007) and the peak value, i.e. maximum focusing evaluation value, has been passed (Step S008), or if it is determined that an “in-focus” state has not been accomplished (Step S007), the peak value has not been passed (Step S008) and the focusing evaluation value has a decreasing trend (Steps S101 and S102).

Accordingly, applicant’s amended independent claim 1, which recites a control device having a driving mode for minutely driving the focus adjusting system before a climbing-drive mode and which, if the focus adjustment system has been driven in one direction until the number of times of the determination repeatedly performed reaches a predetermined number of times, inverts the focus adjusting system from being driven in the one direction, and its dependent claims, patently distinguish over the Nakamura patent and are therefore allowable.

Applicant’s independent claim 20 has been amended to recite an apparatus adapted for a driving device which drives a focus adjusting system from one of a state in which a near-distance object is in focus and a state in which a far-distance object is in focus to the other, said apparatus comprising a control device which restrains said focus adjusting system from

being driven in a same direction if the control device determines that said focus adjusting system has been consecutively driven in the same direction, before determining whether a focusing direction of said focus adjusting system is the same or not more than a predetermined number of times while causing said driving device to drive said focus adjusting system. Applicant's independent claims 24 and 25 have been similarly amended.

The constructions recited in applicant's independent claims 20, 24 and 25, and their respective dependent claims, are not taught or suggested by the cited art of record. In particular, the Examiner has argued as follows:

“...Nakamura teaches a control device (1, 21) which restrains the focus adjusting system from being driven in a same direction if the focus adjusting system has been consecutively driven in the same direction (step 007 determines if the image is in focus during the mountain climbing control and step 301 stops (restrains) from further adjustments), before determining whether a focusing direction of the focus adjusting system is the same or not more than a predetermined number of time (see step S008, in which step S301 is performed before S008 if the image is in focus) while causing the driving device to drive the focusing adjusting system.”

Applicant respectfully disagrees with the Examiner's arguments. In particular, while applicant agrees that Nakamura teaches termination of focusing operation if a determination is made that “in-focus” state has been accomplished, there is no teaching in the Nakamura patent of restraining the driving of the focus adjustment system in the same direction if the control device determines that the focus adjustment system has been consecutively driven in the same direction. Namely, in the Nakamura patent the required condition for proceeding to step S301, i.e. termination of focusing operation, is the determination that the “in-focus” state has been attained (See Column 7, lines 32-35), and not a determination that the focus adjustment system has been consecutively driven in the same direction. Applicant's independent claims

20, 24 and 25, all of which recite this feature, and their respective dependent claims, therefore patentably distinguish over the Nakamura patent.

Moreover, there is no teaching or suggestion in the Nakamura patent of restraining the driving of the focus adjustment system if the control device determines that the focus adjustment system has been consecutively driven in the same direction, before determining whether a focusing direction of the focus adjustment system is the same or not more than a predetermined number of times. In particular, in step S008 of the Nakamura patent, the control operation makes a determination as to whether the focusing operation has passed the peak, i.e. maximum focusing evaluation value, which corresponds to the in-focus state. (Column 7, lines 38-43; Column 1, lines 52-55; Column 2, lines 7-11). This determination in step S008 is made based on the focusing evaluation values obtained during the focusing operation (Column 5, lines 39-43), and not based on whether a focusing direction of the focus adjustment system is the same or not more than a predetermined number of times. Therefore, step S008 in the Nakamura patent does not disclose or suggest this feature recited in applicant's independent claims 20, 24 and 25. Applicant's therefore again submit that independent claims 20, 24 and 25, and their respective dependent claims, patentably distinguish over the Nakamura patent.

Applicant's new independent claims 27 and 28, which recite restraining the focus adjusting system from being driven if it is determined that the focus adjusting system has been consecutively driven in the same direction even if the level of signal indicating the focusing evaluating is increasing, are also submitted as patentable.

In view of the above, it is submitted that applicant's claims 1-14 and 16-19, as amended, are allowable and that applicant's claims 20-25, as amended, patentably distinguish

over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

Dated: April 22, 2005

Respectfully submitted,



Anastasia Zhadina
Reg. No. 48,544
An Attorney of Record

COWAN, LIEBOWITZ & LATMAN, P.C.
1133 Avenue of the Americas
New York, New York 10036
Tel. (212) 790-9200